ABSTRACT

For checking transfer of data cells in an asynchronous switching arrangement, cells are cyclically marked and counted before entering and after leaving the arrangement. A periodical time frame composed of N interleaved checking cycles is imposed. Each cycle includes a first phase for marking and counting the cells, when received and before switching, and a second counting phase for counting cells after switching. An identification mark is introduced in every cell received during the first phase of every cycle, and is linked to the position of this cycle in the time frame. Cells marked according to a cycle are counted as soon as switched during the second phase of the cycle, which starts with a determined delay during each first phase, for a determined duration. A determination of the correspondence between the two counts obtained during a cycle is made, and induces a fault signal if correspondence is not found.

ABSTRACT

METHOD FOR DETECTING LOSS OR EXCESSIVE DELAY IN THE TRANSFER OF DATA CELLS IN AN ASYNCHRONOUS SWITCHING ARRANGEMENT, ELEMENTARY SWITCHING UNIT AND NETWORK EQUIPPED FOR SUCH A METHOD

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For checking transfer of data cells in an asynchronous switching arrangement, cells are cyclically marked and counted before entering and after leaving the arrangement.

10   A periodical time frame composed of N interleaved checking cycles is imposed. Each cycle (C1) includes two phases, a first phase (IC1) for marking and counting the cells, when received and before switching, and a second counting phase (OC1) for counting cells after switching. An identification mark is introduced in every cell received during the first phase of

15   every cycle, it is linked to the position of this cycle in the time frame. Cells marked according to a cycle are counted as soon as switched during the second phase of the cycle, which starts with a determined delay (d1) during each first phase, for a determined duration (t2). A determination of the correspondence between the two counts obtained during a cycle is made and

20   induces a fault signaling as soon as such a correspondence as otherwise determined is not obtained.

Figure for publication: fig. 2